REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The Examiner's decision to make the outstanding restriction requirement "final" is noted. In response to the Examiner's finding of non-obviousness (i.e., patentable distinction) between the three identified species, the applicant has above cancelled the non-elected claims without prejudice or disclaimer. These patentably distinct claims may therefore be pursued in a timely filed divisional application in accordance with standard USPTO practice and the law in view of the Examiner's finding of non-obvious patentable distinction.

For completeness of the record, it is, however, respectfully noted that the identified Species 2 (Figure 7 associated with claims 9-12 and 20-23) is <u>not</u> drawn to a "flow chart". Instead, these patentably distinct (i.e., not-obvious) claims are directed to a method of operating a computer/network interface device.

In addition, it is noted that patentably distinct Species 3 (associated by the Examiner with Figure 4 and claims 13-19 and 24) are similar to elected claims of Species 1 in that <u>both</u> Species 1 and Species 2 are drawn to a computer/network interface device that plugs into a computer port. That is, it will be noted that claim 1 also requires first and second <u>external</u> hardware interfaces on the device for connection to external hardware. Contrary to the Examiner's statement, none of the Species 3, claims 13-19 or

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24, require the plug-connected computer/network interface device to service a host

computer port conforming to the "Peripheral Component Interconnect (PCI) standard".

Even though claims drawn to the non-elected patentably distinct species have been

cancelled (e.g., to save excess claims fees at this point in prosecution), should the

Examiner find generic claims to be allowable, it is respectfully requested that the

applicant be permitted to add back the now cancelled patentably distinct species claims.

The rejection of claims 1-3 and 8 under 35 U.S.C. §102 as allegedly anticipated by

Hair '349 is respectfully traversed.

Contrary to the Examiner's assertion, Hair does not teach a "computer/network

interface device". In particular, while Hair does, of course, teach a computer that

happens to employ a conventional network interface device, the conventional

computer/network interface device employed by Hair clearly does not perform any of the

cryptographic functionality required in applicant's rejected claims.

For example, applicant's rejected claims require the computer/network interface

device to include first and second external hardware interfaces for connection to external

hardware. In addition, claim 1 requires that the first interface be physically disposed in

the device for receiving data from a first zone and a first zone data format, to include

means within that device for processing the received data through performance of a

cryptographic operation on at least a portion thereof and to have the second external

interface disposed in the device for sending the processed data to a second zone in a

second zone data format. One of the interfaces is required to be connectable to a host

computer system and the device is required to include means disposed therewithin to pass processed data exclusively from the processing means to the second external hardware interface within the device.

With respect to such claim 1 recitations defining the claimed computer/network interface device, Hair essentially is irrelevant. In particular, Hair uses only conventional non-cryptographic active network interface devices. To the extent that Hair performs any cryptographic operations, they are performed by use, *inter alia*, of the computer operating system -- which makes the Hair system vulnerable to exactly the sort of cryptographic attack that is the explained object of the present invention to avoid (e.g., see applicant's specification at pages 1-3).

The Examiner's continued practice of quoting or paraphrasing passages from applicant's claim followed by parenthetical citations to a prior art reference which allegedly teaches such feature effectively miss-describes the prior art reference. In particular, the cited passages of Hair do not support the Examiner's allegations. Some examples of these failures are noted below.

As for the claimed first external hardware interface, the "Serving Interface" mentioned at Hair 13:20-24 is not a hardware interface. It is a piece of software (or a file provided by a piece of software) -- the example given in lines 20 and 21 is Microsoft Commerce Server, whereas 22:30-31 suggests the interface might be a web-page.

Figure 1a of Hair is a diagram of the hardware used by Hair. Figure 1a clearly shows the Service Device 10 (a computer) and Communication Means 120 (a network).

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The computer/network interface device between the computer and the network is, from that Figure, clearly the Transceiver 70. The transceiver 70 is described at 17:44-53. It has two interfaces -- one presented to the Serving Device 10 and one presented to the Communication Means 120. there is nothing clever about it, it is just a commercially available product (see 12:10).

As for applicant's claimed processing means, of course computers can encrypt files before sending them. The point is that the encryption takes place in the computer and uses the OS in Hair -- which is <u>contrary</u> to applicant's claim 1 requirement that such cryptographic processing take place <u>within the claimed interface device</u>.

With respect to applicant's claimed second hardware interface, the "Client Interface 21" mentioned at Hair 13:25-29 is <u>not</u> a hardware interface. It is also a piece of software -- the example being given in lines 25-26 is Microsoft Internet Explorer.

It is not understood how the Examiner can assert that the "Serving Interface 20" and the "Client Interface 21" are both "physically disposed in said device" as the claim requires. They are pieces of software on different computers separated by a communications network (see Figures 1a and 1b -- item 20 is the Serving Interface and is clearly on Serving Device 10: item 21 is the Client Device and is clearly on Client Device 11).

As for rejected claim 2, the Examiner has not indicated what in Hair constitutes the first and second zone data formats required by claim 1. This makes it impossible to

With respect to claim 5, Bruell makes the testing of routing devices easier (see 1:44-47 and 66-67). The communication means 120 of Hair might be the Internet (see 19:7-22). But there is no way that the ideas of Bruell would be implemented in the Internet itself.

With respect to claim 6, as pointed out above, neither of the interfaces identified by the Examiner are hardware interfaces.

With respect to claim 7, Hair at 21:67-22:22 is about the Next Client Device 12 (shown in Figure 2b), not the Serving Device 10 and Client Device 11 previously relied on by the Examiner in argument against claim 1. There is no suggestion by the Examiner up until this point that the first and second hardware interfaces might be anywhere other than on the Serving Device 10 and the Client Device 11.

Hair at 11:23-34 recites that the user of the Client Device 11 can request a file via a web-page on Serving Device 10. But requesting download of a file doesn't change any rules in any store. Since Bruell is about testing routers during their development, there is no way that the rules disclosed in Bruell would be put on a Server Computer like the Serving Device 10.

The Examiner's attention is also drawn to new method claims 25-32 which correspond respectively to elected apparatus claims 1-8. These claims are also believed to be allowable for reasons already noted above with respect to the parallel apparatus claims.

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assert that conversion from the first data format to the second data format even takes place.

As for claim 3, the Examiner's argument here is doubly-flawed -- see comment on claim 2 above.

As for claim 8, the comments made in relation to claim 1 above apply here with equal force.

Although it is already clearly present in the earlier claim language, claim 1 has been amended above so as to make even more explicit the fact that the claimed device is a computer/network interface device for interfacing between a computer and a network, the device being pluggable into a computer, etc.

The rejection of claims 4-7 under 35 U.S.C. §103 as allegedly being made "obvious" based on Hair in view of Bruell '585 is also respectfully traversed.

Fundamental deficiencies of Hair have already been noted above with respect to parent claim 1. Bruell does not supply those deficiencies.
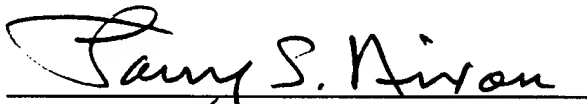
With respect to claim 4, the Examiner's argument is perhaps not understood. Of course there were prior art IP routers, for example, which treated packets differently depending on where they were addressed to go. However, neither Bruell nor Hair mentions differential treatment of packets. Claim 4 requires, in the claimed context, for the claimed type of interface device to also treat packets differentially. The cited art does not offer any such teaching or suggestion.

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Accordingly, this entire application is now believed to be in allowable condition

and a formal Notice to that effect is respectfully solicited.

Respectfully submitted,

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